

## Worker Fatality Alert

### Methylene chloride linked to worker death in church

#### Prevention Points

- Methylene chloride can be fatal if used in poorly ventilated areas
- Use safer methods and less toxic chemicals to remove paint

The **California Fatality Assessment and Control Evaluation (CA/FACE)** program tracks and investigates cases of fatal injuries at work, and makes prevention recommendations for employers and workers. The CA/FACE program is investigating the preventable death of a 24-year-old worker who was using a paint stripper inside a baptismal font (tub) of a church.

**What happened?** The victim was removing a waterproof paint coating from the baptismal font (tub) of a church. The font is located in a narrow, enclosed room (41 feet long by 4 feet wide by 12 feet high) and bordered by two sets of steps. There are two doors on each end of the room and a large window facing the congregation. The victim applied one gallon of a paint stripper containing 60 – 85% methylene chloride to the steps and font. The paint stripper is a widely available consumer product and was purchased by church staff at a local home improvement store. There was a small portable fan close to the work area and the victim did not use respiratory protection. The victim probably did not know how quickly he could be overcome by the methylene chloride vapors in a closed room. The church pastor saw the victim working in the late afternoon. At that time the doors and window were open and the paint stripper had been applied to the font surface and steps. Later that night, however, another church staff person found the victim motionless on the floor of the font with the doors and window closed. He was pronounced dead by emergency medical personnel.



**What was the cause?** The victim died from inhaling toxic amounts of methylene chloride in a small, poorly ventilated space. Methylene chloride vapor can build up in air quickly and can be fatal if too much is inhaled. Between 2000 and 2011, methylene chloride-based paint strippers have been linked to 13 deaths of workers refinishing bathtubs. Because methylene chloride-based paint strippers are widely available at local home improvement stores, employers and consumers can easily purchase this potentially toxic product.

**What should be done to prevent this from happening again?** Employers and employees should recognize that methylene chloride can quickly build to toxic levels in poorly ventilated spaces. Warning labels are often not adequate to guide safe work practices in these spaces. Precautions should include an air-supplied respirator, special protective gloves, and adequate mechanical ventilation. Because of the serious harm that can occur from inhaling methylene chloride vapors, employers, workers, and consumers should always consider safer alternatives to strip paint from surfaces. Abrasive sanding with local exhaust ventilation to capture dust, or benzyl alcohol based strippers (without n-methyl pyrrolidone or NMP) can be used with good results. These safer strippers can be found at select local stores.

**For more information see:** <http://www.cdph.ca.gov/programs/hesis/Documents/MethyleneChlorideAlert.pdf>